



US Army Corps
of Engineers.

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

NUMBER: 292650N

DATE: June 20, 2005

RESPONSE REQUIRED BY: July 20, 2005

PERMIT MANAGER: David A. Ammerman

PHONE: 707-443-0855

Email: David.A.Ammerman@usace.army.mil

1. INTRODUCTION: The RDHC, LLC, P.O. Box 1028, Eureka, California 95502 (Contact Mr. Marty McClelland of Oscar Larson and Associates at 707-445-2043) has applied for a U.S. Army Corps of Engineers (Corps) permit to discharge fill into waters of the United States (seasonal wetlands adjacent to other waters of the U.S.) in connection with construction of the Vance Dairy Wetland Enhancement Project. Project activities include the excavation of 23,000 cubic yards (CY) of soil to create two ponds covering 7 acres of wetland pasture, installation of water control structures for the ponds and the after-the fact authorization of a culvert replacement, installation of a water control structure to impound water and grading of pasture lands. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. Section 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403).

2. PROPOSED PROJECT:

Project Site: The project will be located on private property owned by RDHC, LLC (formerly known as the Vance Dairy, APN 311-191-01, and 311-181-01), bounded on the east by Salmon Creek and Highway 101, on the south by Hookton Road, on the

west by other private lands, and on the north by the terminus of Hookton Slough and lands of the Humboldt Bay National Wildlife Refuge (U.S. Fish and Wildlife Service) (See sheets 1 and 2 of 5). The proposed 7-acre wetland Enhancement project would take place within approximately 90 acres of low elevation pasturelands.

Unless otherwise stated, the following project site description is derived from Oscar Larson and Associates Transmittal of March 22, 2005 or on field observation by Corps Eureka Office staff. The applicant states the existing agricultural value of the Project Site is in adequate to poor condition due to a variety of factors:

A levee break (repaired in October 2004 under Corps Permit No. 28625 dated October 1, 2004), measuring 35 feet in the southeast corner of the project site near where Salmon Creek flows under Hookton Road (See Sheet 3 of 5), had increased flooding from Salmon Creek onto adjacent livestock pasture. This caused erosion of high grade soil types on the eastern portions of the project site and extensive deposition of poor soil type sediment throughout the remainder of the site.

The existing drainage ditches that connect

the project site to the Hookton Slough tide gates have become inadequate. This is due to extensive silt deposits, vegetation growth and bypassing by new water channels caused by soil erosion from extensive Salmon Creek flooding. Due to poor drainage, flooding of the project site causes damage to existing residential and agricultural structures of the parcel, causes temporary closures of Hookton Road and (the applicant states) damages neighboring access roads to the Hookton Unit of the Wildlife Refuge.

The project site's pasturelands have not been irrigated and farmed for an extensive time period (probably not within the last five years). Approximately 45 acres of the 90-acre project site is below the 8-foot elevation above sea level and can be considered former tidelands prior to diking and drainage activities since the turn of the 20th Century. The remaining area is within the Federal Emergency Management Agency (FEMA) 100-year floodplain of Salmon Creek between the 8-foot and 16-foot elevation and is temporarily flooded (one to three days at a time) with seasonal runoff. The elevation of the project site ranges from 4 and 16 feet, lowest in the northwest corner and highest along the east side adjacent to Salmon Creek. The topography is gradual (less than 3% slope) with shallow drainages that border parts of the north, west and south boundaries of the property, and two small channels, one originating from the northwest corner of the site that is caused by a leaky tide gate on Hookton Slough, and the other from the southeast corner of the site where water flows through a breach in Salmon Creek levee during high flow periods (Mad River Biologists, *Biological Evaluation and*

Wetland Investigation For Vance Dairy Wetland Project, Humboldt County, California, August 20, 2004).

The project area and adjoining lands are protected from the tides by a dike around Hookton Slough and by established drainage ditches that lead to one-way tide gates. These tide gates let floodwater off the property and into Hookton Slough. Some periodic leakage of these tide gates results in saline/brackish conditions in the ditches during the summer months. An earthen levee exists along the west bank of Salmon Creek and runs along the bank for approximately 850 feet (See Sheet 3 of 5).

On the property of the Humboldt Bay National Wildlife Refuge (Refuge), a "fish door" and an apparently damaged tide flap on the Salmon Creek tide gate allows for the continual exchange of water between Hookton Slough and Salmon Creek, which results in a muted tide cycle within the Salmon Creek Estuary. This muted tide cycle may occasionally reach 4.0-feet, and under certain tidal conditions, the backwater effects could extend as far upstream as the "first diversion" just north of the project on Refuge property (Mad River Biologists, August 2004 with reference to document from Pacific Coast Fish, Wildlife and Wetlands Restoration Association, August 2003).

Salt-tolerant plant species such as salt grass (*Distichlis spicata*), seacoast bulrush (*Scirpus maritimus*), seaside arrowgrass (*Triglochin maritima*) and other species occur at or below the 4-foot elevation level at the northwest corner of the property where the land is affected by tidewater. Above the 4-foot elevation level, poorly

drained Bayside soils support wetland plant species such as small-flowered bulrush (*Scirpus microcarpus*), silverweed (*Potentilla anserine* ssp. *Pacifica*), water foxtail (*Allopecurus geniculatus*), common rush (*Juncus effuses* var. *brunneus*), mannagrass (*Glyceria occidentalis*) and spikerush (*Eleocharis macrostachya*). Higher elevation portions of the property begin a more dominant pattern of exotic or non-native grasses such as bent grass (*Agrostis stolonifera* and *Agrostis viridis*), ryegrass (*Lolium multiflorum*), and velvet grass (*Holcus lanatus*).

The Refuge initiated a number of habitat enhancement projects since creation of their "Salmon Creek Unit". One project included extensive tree planting within the riparian corridor of Salmon Creek. A narrow, but dense strip of mature willow (*Salix lasiolepis* and *Salix hookeriana*, or hybrids of the two) and red alder (*Alnus rubra*) borders the project site where it is adjacent to Salmon Creek. Willow and alder were also planted along much of the north, west and southwest property lines, creating a natural screen between the project area and adjacent Refuge properties and a short stretch of Hookton Road (Mad River Biologists, August 2004).

Project Description: As shown in the attached drawings, the applicant plans to conduct the following proposed work:

Approximately 7 acres of topsoil would be excavated to create two ponds, one approximately 5 acres (2 hectares) and the other approximately 2 acres (0.80 hectares) in size with an average depth of one foot. The topsoil from the areas to be excavated would be stripped and temporarily

stockpiled on adjacent pasture. After excavation, the excavated topsoil would be pushed back into the pond slopes and bottoms to restore soil fertility and the seed bank. Construction would require the use of bulldozers to strip and stockpile topsoil and sod, scrapers to excavate and compact subsoil, and front-end loaders and dump trucks to haul excess fill from the site. The ponds to be created have been designed to avoid prime agricultural soil on the property (See Sheets 3 and 4 of 5). Construction of the two ponds would require the excavation of approximately 23,000 CY of subsoil. Materials not retained on site would be disposed of offsite on properties of the owner (outside of Corps jurisdiction) or at permitted landfill sites.

The ponds would normally be supplied with water from the existing well with pump, during the period of October 1 and June 1. Rainfall and flood flows would supplement this supply during the fall and winter seasons. The property owners have refurbished the existing well and pump motor and added a pasture irrigation system for late summer usage. This would allow an increase in productivity of the summer pasture for grazing of livestock.

Each of the two ponds would include installation of a stop log riser (water control structure)(See Sheet 5 of 5) using excavators and gas-powered compactors in order to allow management of water levels for seasonal effect and to draw down water levels for summer grazing.

If certain wetland plant species, such as cattails (*Typha latifolia*), rushes (*Juncus* sp.) or other related vegetation comprise more than 25% of the ponded areas by the end of

draw down, they would be controlled by disking, grazing or burning during August and September of each year. Nuisance weed species such as thistle, Himalayan blackberry and Queen Anne's lace would be controlled by mechanical or chemical means.

The property owner conducted similar pond excavation and installation of water control structures on the northwest corner of the property between September and October of 2004. A water control structure (stop logs) and a culvert were replaced where a drainage occurs at the boundary between the RDHC, LLC property and the Refuge. Approximately one to two acres of water were impounded by the water control structure. This work was not authorized under a Corps permit. However, the Corps is combining this after-the-fact activity for permitting consideration, with the proposed activity described above in this Public Notice.

Purpose and Need: The basic purpose of this project is to enhance wetland and waterfowl values of this property by constructing 7 acres of ponds with water control structures. The applicant states the overall purpose of this project is to maintain traditional agricultural uses, including livestock grazing, while at the same time enhancing the value of the property for wildlife and outdoor recreation. Managed livestock grazing would continue after project is completed and contributes to the goals of the project by reducing plant cover height and increasing the quality of forage attractive to Aleutian Canada Geese. Cattle would be rotated seasonally between the adjacent hillside property (during the fall and winter) and the project area (in the

spring and summer months of the year). Currently, winter rains generate runoff from the site that, the applicant states, contains elevated levels of nutrients and fecal coliform bacteria from manure. These pollutants may depress oxygen levels in Hookton Slough and contaminate shellfish in Humboldt Bay. The applicant states implementation of the project would increase the residence time of runoff on the property, allowing wetlands to reduce nitrogen and coliform inputs to the bay. Additionally nutrients from manure may increase productivity of the wetlands, especially invertebrates, a highly valued food category for waterfowl and shorebirds.

Impacts: The project will result in excavation, grading, and fill activity on approximately 7 acres of seasonal wetland pasture, delineated as waters of the United States, Corps jurisdictional waters. This includes installation of water control structures with associated soil backfill. There would be temporary stockpiling of excavated soil on adjacent wetland pasture (possibly another 0.50 to one acre of temporary impact). Excess excavated material would be hauled away to upland sites or designated landfills.

Mitigation: The applicant has proposed no mitigation for this project as the project purpose, in part, is to enhance wetland and waterfowl habitat on 7 acres of private land. There would be an expected out-of-kind, on-site replacement of existing palustrine freshwater seasonal wetland with open water ponds for waterfowl. The margins of the ponds would likely recolonize with submergent and emergent wetland plant species such as cattail. The Corps may require the applicant (the

applicant has not proposed to do this) to keep a buffer of submergent-emergent wetlands and some palustrine wetlands between the open water ponds and the grazed managed wetland pasture. However, the following measures would be accomplished to minimize impacts to existing wetlands and other waters of the United States, including Salmon Creek and Hookton Slough:

Cattle would be excluded from the ponded areas in order to encourage waterfowl use and avoid cattle-induced compaction or soil alteration. Electric fences may be used to further concentrate cattle under an intensive stocking and rotation program to take full advantage of the growth characteristics of pasture on the parcel. The property owner will exclusively control use of and access to the project area. Access is through a gate with lock.

After excavation of the ponds and stockpiling of topsoil and sod, the excavated material would be pushed back into the pond slopes and bottoms to restore soil fertility and the seed bank. Exotic or nuisance weeds such as thistle, Himalayan blackberry and Queen Anne's lace would be controlled by mechanical or chemical means.

During pond construction and water control structure installation, work would be kept within the boundary of work to minimize additional impact to wetlands. Salmon Creek and Hookton Slough waters would be avoided entirely for this project. Sediment may build up in the ponds behind the stop logs, there would be controlled releases of water when necessary, and this would minimize any

sediment influx to adjacent waterways.

3. **COMPLIANCE WITH VARIOUS FEDERAL LAWS:**

National Environmental Policy Act of 1969 (NEPA): The Corps will assess the environmental impacts of the proposed action in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. Section 4371 et. seq.), the Council on Environmental Quality's Regulations (40 CFR Parts 1500-1508), and the Corps' Regulations (33 CFR Part 230 and Part 325, Appendix B). Unless otherwise stated, the Environmental Assessment will describe only the impacts (direct, indirect, and cumulative) resulting from activities within the Corps' jurisdiction. The documents used in the preparation of the Environmental Assessment will be on file with the U.S. Army Corps of Engineers, Eureka Field Office, Regulatory Branch, Woodley Island, 601 Startare Drive, Eureka, California 95501.

Endangered Species Act of 1973 (ESA): Section 7 of the Endangered Species Act requires formal consultation with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NOAA Fisheries), if a Corps permitted project may adversely affect any Federally listed threatened or endangered species or its designated critical habitat. Listed species and critical habitat currently identified as potentially impacted by the proposed project include the Federally-listed threatened coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*O. tshawytscha*), and steelhead (*O. mykiss*). Hookton Slough and Salmon Creek are critical habitat for

coho salmon and proposed critical habitat for Chinook salmon and steelhead. The Corps initiated informal Section 7 consultation with NOAA Fisheries on July 2, 2004, regarding potential impacts to listed salmonid species and critical habitat that would result from the initial repair of the earthen dike (35 lineal feet) on the left bank of Salmon Creek near the intersection of Hookton Road with Salmon Creek. NOAA Fisheries concurred with the Corps that the one-time repair of this dike may affect but would not adversely affect listed species or critical habitat. The Corps then issued Permit No. 28529N, dated October 1, 2004, under Nationwide Permit 13, Bank Stabilization, to RDHC, LLC to repair the dike. This dike repair was completed in October 2004. RDHC, LLC has requested authorization to repair the dike again at the same location in 2005 due to high winter flows washing out the repair work during the winter of 2004-2005. Section 7 consultation is ongoing for this second dike repair at Salmon Creek.

In addition to the dike repair in the fall of 2004, RDHC, LLC constructed a water control structure and pond on a swale that leads into the Hookton Slough area on the northwest portion of the property. The applicant also replaced a culvert at the property line along the same alignment as the pond and stop log. This activity was not authorized under Corps permit, and a Corps Cease and Desist Order was sent to the applicant on February 10, 2005. NOAA Fisheries also notified the applicant of a possible take of listed species from the unauthorized work by letter dated February 5, 2005. Since that time the applicant has cooperated with the Corps and NOAA Fisheries; a meeting in March

2005 was held to discuss the above activity along with proposed activity on the property as they relate to ESA impacts. As a result of that meeting, the applicant agreed to and has completed removal of the stop logs associated with the water control structure of the unauthorized pond at the recommendation of NOAA Fisheries and the Corps. Also at that meeting, NOAA Fisheries suggested that the applicant consider constructing a setback levee parallel to the existing dike adjacent to Salmon Creek in order to prevent adverse impacts to aquatic resources that would occur each time that the existing dike would require repair from storm erosion. This discussion is still ongoing.

With respect to the proposed 7-acre ponds and water control structure installation, and associated activities, the Corps will be initiating Section 7 consultation pursuant to the ESA with NOAA Fisheries regarding the above project's potential impacts to listed salmonids and their critical habitat, including requesting a conference on proposed critical habitat for steelhead and Chinook salmon.

Magnuson-Stevens Fisheries Conservation and Management Act: The NOAA Fisheries and several interagency fisheries councils have designated specific water bodies as Essential Fish Habitat (EFH) in accordance with the Magnuson-Stevens Fisheries Conservation and Management Act. Specific EFH concerns associated with this proposal include Chinook salmon, coho salmon and a variety of estuarine and marine fish in Hookton Slough, and coho salmon and Chinook salmon in Salmon Creek. Coordination with NOAA Fisheries in

regard to EFH will be initiated concurrently with the ESA consultation, if necessary.

Clean Water Act of 1972 (CWA):

a. Water Quality: Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must first obtain a State water quality certification before a Corps permit may be issued. By letter dated May 17, 2005, the California Regional Water Quality Control Board (RWQCB), North Coast Region, granted Section 401 Water Quality Certification to RDHC, LLC for the above described Vance Dairy Enhancement Project (includes the 7-acre pond construction, water control structure installation) and repair of a dike breach for 2005).

Those parties concerned with any water quality issue that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, North Coast Region, 5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403, by the close of the comment period of this Public Notice.

Alternatives: Evaluation of this proposed activity's impact includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. Section 1344(b)). The applicant has submitted an Analysis of Alternatives for the project and it will be reviewed for compliance with the guidelines. The applicant has addressed the following alternatives (as described in the Oscar Larson and Associates Transmittal of March 22, 2005:

No Project Alternative - The site frequently flooded due to the levee break on Salmon Creek. As a result, sediment was deposited on the Vance Dairy pasture and sediment and manure was deposited on adjacent Refuge lands. Flood flows routed overland through the levee break would have continued to cause erosion of the Hookton Unit access road (within the Refuge) and would have reduced public access to the walking trail. Juvenile and adult salmonids could have continued to be stranded by flows escaping the main channel of Salmon Creek. Runoff containing sediments and nutrients from grazed uplands that entered the site would have continued to drain into ditches and through the tide gate directly into Hookton Slough. Agricultural productivity and fish and wildlife would have continued to decline under the no-project alternative.

Preferred Alternative - The preferred alternative involves excavating 7 acres of ponds. Repair of the levee on Salmon Creek (completed October 2004) minimized stranding of juvenile and adult salmonids and will direct them through the newly restored and planned enhanced estuary portions of the Refuge (As mentioned previously the dike breached again, and the applicant has applied to the Corps to repair the breach at the same location). The preferred alternative provides a net increase of more than 7 acres of enhanced wetland habitat for fish, wildlife and water quality. Total wetland fill is 330 square feet of wetlands (to repair the levee break). The enhanced

area is 7 acres. This alternative would capture hillside runoff to provide habitat and to reduce the impact of sediment and nutrients to Hookton Slough.

Project Alternative #1 - This alternative involves excavating 13 acres of ponds, using fill to repair the Salmon Creek levee and creating a new levee to the elevation of 7 feet with reduced top width and footprint. Reduction of top width from 12 feet to 6 feet does not meet U.S. Natural Resource Conservation Service (NRCS) minimum specifications and eliminates the possibility of using standard levee maintenance equipment on the levee top, thus increasing the potential for failure during flood events. No wildlife islands would be included in the impoundment, reducing safe roosting and nesting habitat and shallow water feeding for waterbirds. This alternative provides a net increase of more than 30 acres of enhanced wetland habitat for fish, wildlife and water quality. Total wetland fill would be 1.04 acres; enhanced area would be 31.4 acres. This alternative will also capture hillside runoff to provide habitat and to reduce impacts of sediment and nutrients to Hookton Slough. Total cost of this alternative would be approximately two times greater than the preferred alternative, and thus was rejected from consideration.

Project Alternative #2 - Dredge Only - this alternative requires dredging a total of 26.1 acres and repairing the dike on Salmon Creek, but does not create wildlife islands. Although this alternative avoids filling in wetland

areas other than those involved in the levee repair, this alternative does not capture hillside runoff. Thus, the present sediment and nutrient load from adjoining uplands is not reduced. Total acreage of enhanced wetland is 26.1 acres. A total cost of this alternative is nearly twice the cost of the preferred alternative.

Discussions are currently ongoing between the Corps, NOAA Fisheries, the Refuge, and the applicant regarding consideration for a setback levee as an alternative to repeated repair of the existing levee.

An evaluation has been made by this office under the guidelines and it was determined that the proposed project is water dependent (hydrology and water availability necessary for wetland and waterfowl enhancement).

Coastal Zone Management Act of 1972 (CZMA): Section 307 of the Coastal Zone Management Act requires the applicant to certify that the proposed project is consistent with the State's Coastal Zone Management Program, if applicable. No Corps permit will be issued until the State has concurred with the applicant's certification. Coastal development issues should be directed to the California Coastal Commission (CCC), Eureka Office, P.O. Box 4908, Eureka, California 95502-4908.

National Historic Preservation Act of 1966 (NHPA): Based on a review of survey data on file with various City, State and Federal agencies, historic or archeological resources are known to occur in the project vicinity. The permit application and Public

Notice is being forwarded to the Corps' San Francisco District Archaeologist for further review. The cultural resources coordinator in the San Francisco District will be consulted regarding the proposed project activities. The Corps anticipates consultation with local Indian tribes, including the Table Bluff Reservation of the Wiyot Tribe, and the Tribal Historic Preservation Office of the Yurok Tribe and/or the State Historic Preservation Office (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA), prior to making a decision on this project.

4. PUBLIC INTEREST EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposed activity must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including its cumulative effects. Among those factors are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

5. CONSIDERATION OF COMMENTS:

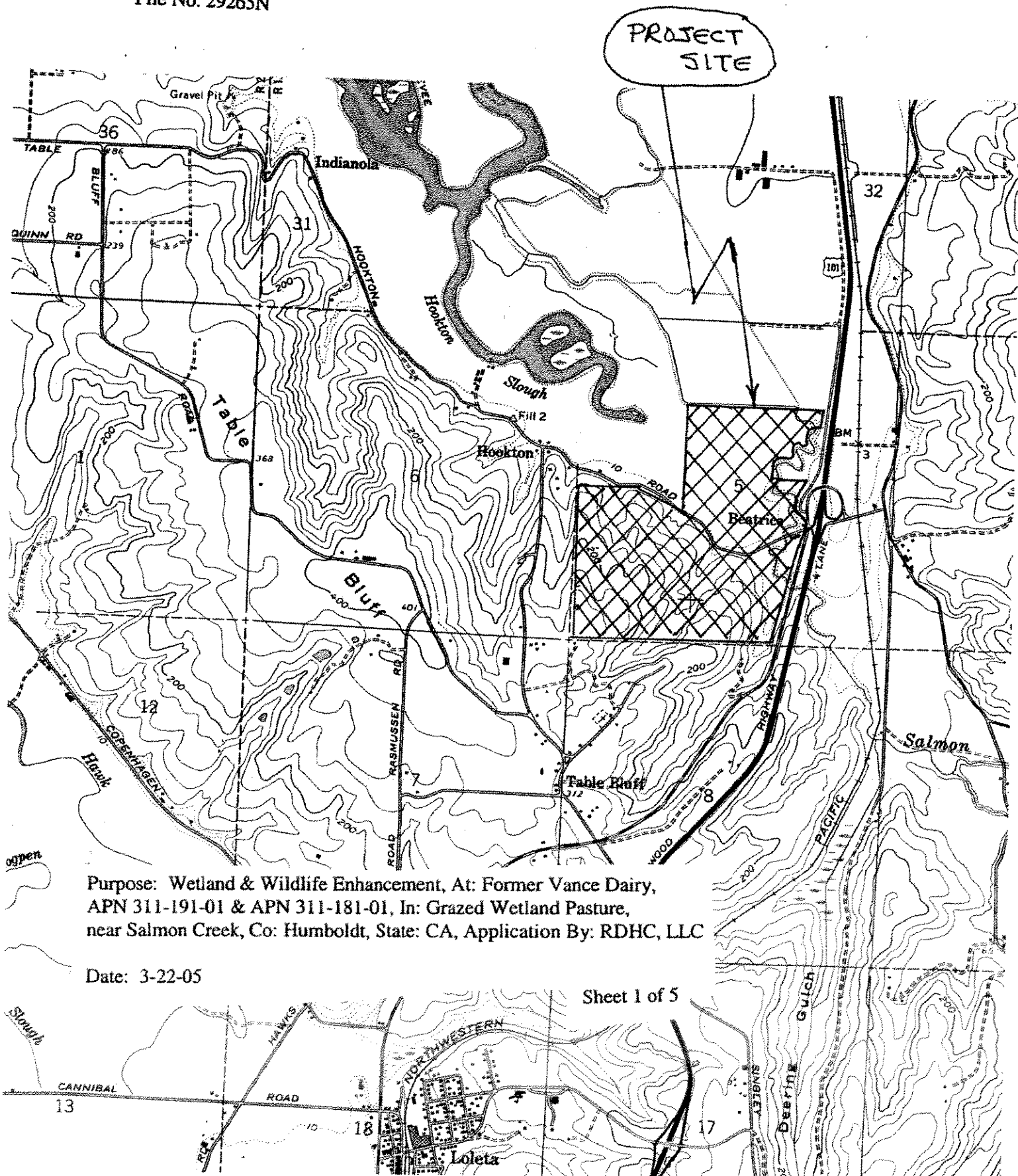
The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity.

6. SUBMISSION OF COMMENTS: Interested parties may submit, in writing, any comments concerning this activity. Comments should include the applicant's name and the number and the date of this Public Notice, and should be forwarded so as to reach this office within the comment period specified on Page 1. Comments should be sent to Mr. David Ammerman, U.S. Army Corps of Engineers, San Francisco District, Eureka Field Office, P.O. Box 4863, Eureka, California 95502. It is the Corps' policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this Public Notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the

reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose name and address are indicated in the first paragraph of this Public Notice or by contacting David A. Ammerman of our office at telephone 707-443-0855 or E-mail: David.A.Ammerman@spd02.usace.army.mil.

Details on any changes of a minor nature that are made in the final permit action will be provided upon request.

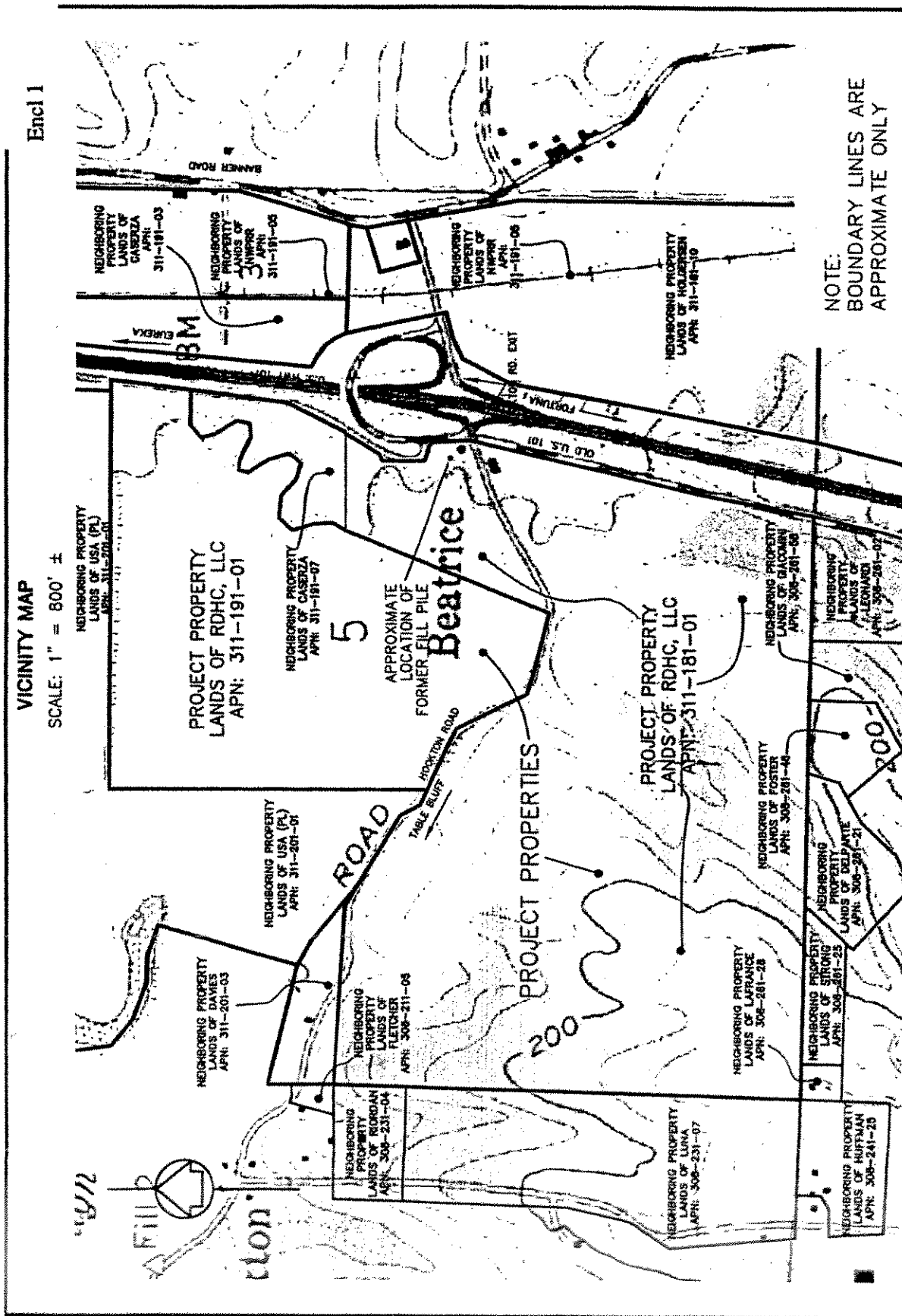
File No. 29265N



Purpose: Wetland & Wildlife Enhancement, At: Former Vance Dairy,
 APN 311-191-01 & APN 311-181-01, In: Grazed Wetland Pasture,
 near Salmon Creek, Co: Humboldt, State: CA, Application By: RDHC, LLC

Date: 3-22-05

Sheet 1 of 5



OSCAR LARSON & ASSOCIATES

Purpose: Wetland & Wildlife Enhancement, At: Former Vance Dairy, APN 311-191-01 & APN 311-181-01, In: Grazed Wetland Pasture, near Salmon Creek, Co: Humboldt, State: CA, Application By: RDHC, LLC

Sheet 2 of 5

Date: 3-22-05

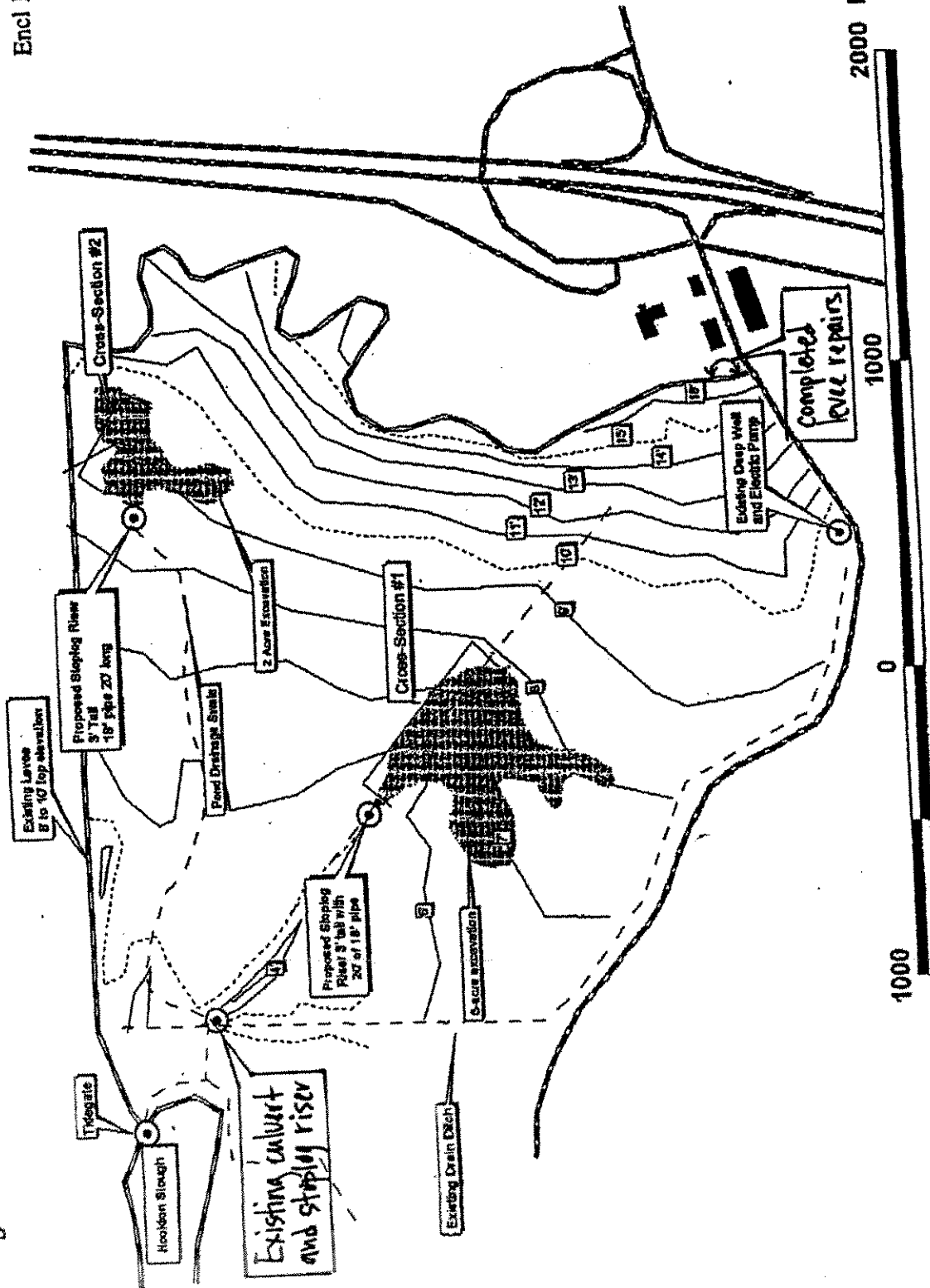
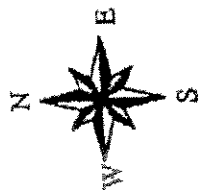
Figure 1

Vance Dairy Conceptual Plan Rev. 2-23-05

File No. 29265N

Encl 1

- Buildings
- Ditches
- Water control structures
- Roads
- Existing levees
- 6-foot contours
- Contours
- Ponded area



Purpose: Wetland & Wildlife Enhancement, At: Former Vance Dairy, APN 311-191-01 & APN 311-181-01, In: Grazed Wetland Pasture, near Salmon Creek, Co: Humboldt, State: CA. Application By: RDHC

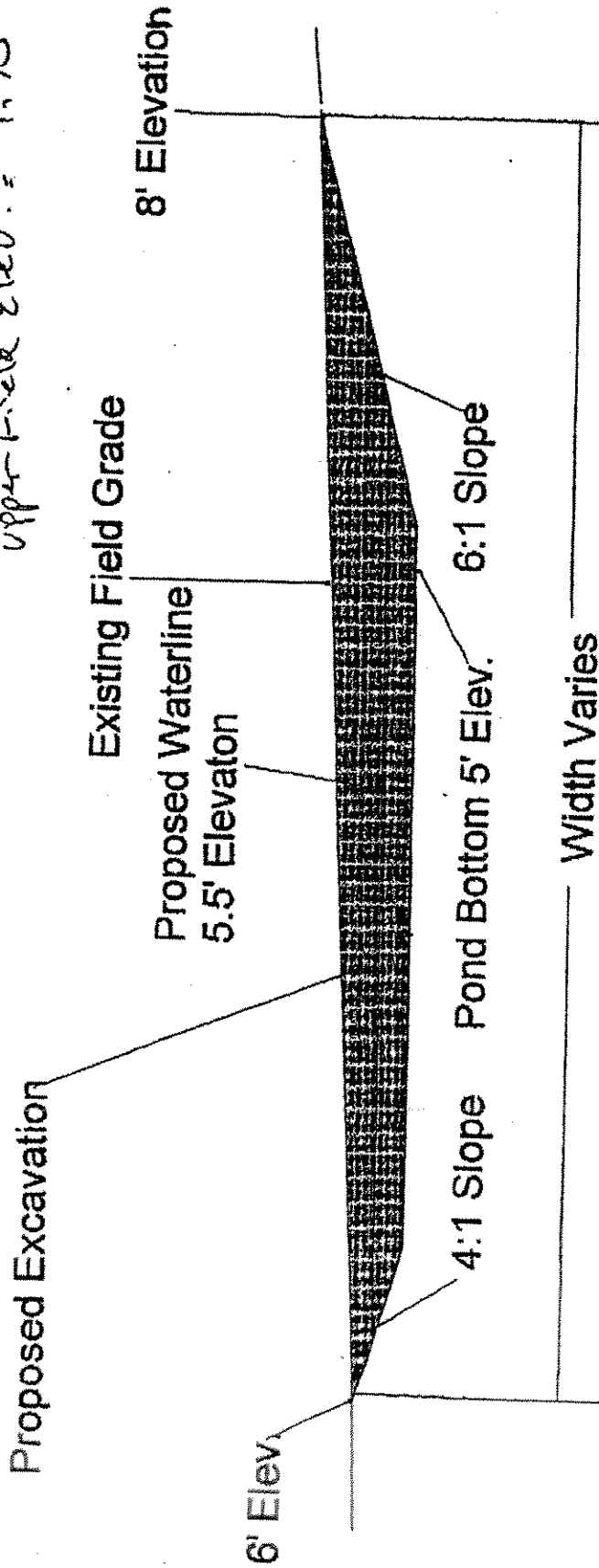
Date: 3-22-05

File No. 29265N

Encl 1

Vance Dairy
Cross-Section #1
Pond Excavation

Cross-Section 2
lower Field Elev. = 8.5'
Pond bottom = 7.0
Proposed Waterline 8.0
Upper Field Elev. = 9.75



Field Grade
Excavation

Sheet 4 of 5

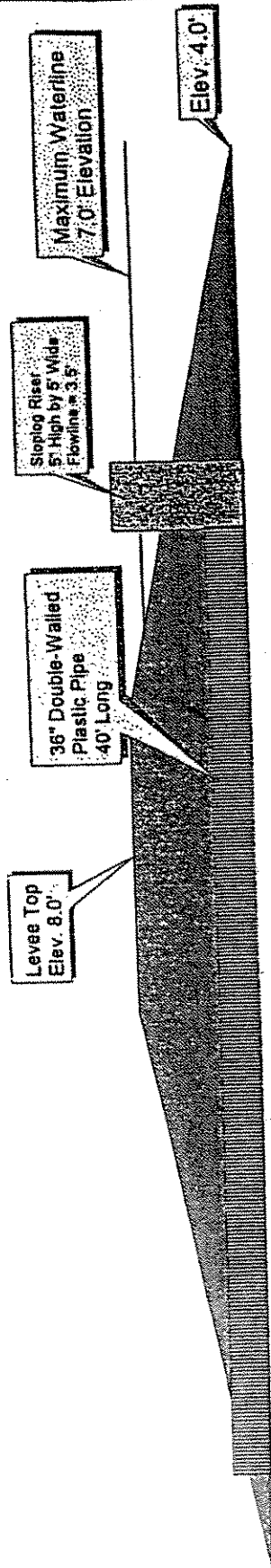
Purpose: Wetland & Wildlife Enhancement, At: Former Vance Dairy,
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near Salmon Creek, Co: Humboldt, State: CA, Application By: RDHC, LLC

Laura R

File No. 29265N

Encl 1

Vance Dairy Detail #1 Stoplog Riser Installation



Waterline
Drain pipe
Stoplog Riser
Levee Fill

Purpose: Wetland & Wildlife Enhancement, At: Former Vance Dairy,
APN 311-191-01 & APN 311-181-01, In: Grazed Wetland Pasture,
near Salmon Creek, Co: Humboldt, State: CA, Application By: RDHC, LLC